

IN THE CLAIMS:

Claim 18 has been amended herein. All of the pending claims 1 through 20 are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as amended.

Listing of Claims:

1. (Previously presented) A method for oxidizing one of a gate dielectric layer and a cell dielectric layer on a portion of a silicon substrate in an atmosphere comprising:
raising the temperature of the silicon substrate to a temperature of at least about 600°C.;
providing a gas atmosphere of N₂O, the gas atmosphere of N₂O having a pressure of at least about five atmospheres for contacting at least a portion of the silicon substrate using a catalytically disassociated gas atmosphere of N₂O; and
contacting a portion of the gas atmosphere of N₂O with a catalytic matrix consisting of one or more metals for forming a catalytically disassociated gas atmosphere of N₂O for contacting at least a portion of the silicon substrate.
2. (Previously presented) The method according to claim 1, further comprising:
forming an oxide layer on the one of a gate dielectric layer and a cell dielectric layer on the portion of the silicon substrate.
3. (Previously presented) The method according to claim 1, further comprising:
forming an oxide layer on a portion of the silicon substrate.
4. (Previously presented) The method according to claim 1, further comprising:
oxidizing a tantalum oxide layer on a portion of the silicon substrate.

5. (Previously presented) The method according to claim 1, further comprising:
forming a barium strontium titanium oxide layer on a portion of the silicon substrate.

6. (Previously presented) The method according to claim 1, further comprising:
forming a strontium bismuth titanate oxide layer on a portion of the silicon substrate.

7. (Previously presented) The method according to claim 1, wherein the catalytic
matrix is selected from the group consisting of lead, platinum, iridium and palladium.

8. (Previously presented) The method according to claim 1, wherein the catalytic
matrix is selected from the group consisting of rhodium, nickel, and silver.

9. (Previously presented) A method for oxidizing a portion of a silicon substrate
comprising:
changing the temperature of the silicon substrate to a temperature in a range of about 600°C. to
800°C.;
providing a gas atmosphere of N_2O , the gas atmosphere of N_2O having a pressure of at least
about five atmospheres for contacting at least a portion of the silicon substrate using a
catalytically disassociated gas atmosphere of N_2O ; and
contacting a portion of the gas atmosphere of N_2O with a catalytic matrix consisting of at least
one metal for forming a catalytically disassociated gas atmosphere of N_2O for contacting
at least a portion of the silicon substrate.

10. (Previously presented) The method according to claim 9, further comprising:
forming a nitride layer on a portion of the silicon substrate.

11. (Previously presented) The method according to claim 9, further comprising:
forming an oxide layer on a portion of the silicon substrate.

12. (Previously presented) The method according to claim 9, further comprising:
forming a tantalum oxide layer on a portion of the silicon substrate.
13. (Previously presented) The method according to claim 9, further comprising:
forming a barium strontium titanium oxide layer on a portion of the silicon substrate.
14. (Previously presented) The method according to claim 9, further comprising:
forming a strontium bismuth titanate oxide layer on a portion of the silicon substrate.
15. (Previously presented) The method according to claim 9, wherein the catalytic
matrix is selected from the group consisting of lead, platinum, iridium and palladium.
16. (Previously presented) The method according to claim 9, wherein the catalytic
matrix is selected from the group consisting of rhodium, nickel, and silver.
17. (Previously presented) A method for oxidizing a portion of a silicon substrate
comprising:
providing an atmosphere having a temperature of at least about 600°C.;
providing a gas atmosphere of N₂O, the gas atmosphere of N₂O having a pressure of at least
about five atmospheres;
contacting at least a portion of the silicon substrate with a portion of the gas atmosphere of N₂O
having a pressure of at least about five atmospheres; and
contacting a portion of the gas atmosphere of N₂O with a catalytic matrix consisting of at least
one metal for forming a catalytically disassociated gas atmosphere of N₂O for contacting
at least a portion of the silicon substrate.

18. (Currently amended) The method according to claim 17, further comprising:
forming at least one of a nitride layer on a portion of the silicon substrate, an oxide layer on a
portion of the silicon substrate, a tantalum oxide layer on a portion of the silicon
substrate, a barium strontium titanium oxide layer on a portion of the silicon substrate,
and a strontium bismuth titanate oxide layer on a portion of the silicon substrate.
19. (Previously presented) The method according to claim 17, wherein the catalytic
matrix is selected from the group consisting of lead, platinum, iridium and palladium.
20. (Previously presented) The method according to claim 17, wherein the catalytic
matrix is selected from the group consisting of rhodium, nickel, and silver.